

Laura,

I've reviewed the stage/depth output you sent to me for the LECSTM calibration/validation. I strongly suggest that someone like Gwen Burzycki (MD- DERM), who is intimately familiar with on-the-ground conditions/trends in the study area, also be consulted for this type of soft-calibration effort.

The following are my observations of the data you provided in your April 5, 2006 e-mail.

Calibration/validation stages at the locations of interest (i.e., PM 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 100, 101, 102, and 103) seem to be in general agreement with available DBHYDRO stage data for corresponding field stations. However the higher and lower ranges of the field stages are not matched as well as stages that fall in the middle of each field station's observed range (e.g., greater error at /near extremes).

I also looked at DBHYDRO S18C discharge data for the calibration/validation period as an indicator of upstream hydrologic conditions, and to see if the calibration/validation stage response patterns were reasonably consistent with hydrologic conditions that might have caused discharges at S18C. One potential issue noted during the review is that the calibration/validation stages, in some cases, are slightly noisier than the field data (see note for PM 3 (PM3 is near US-1; may be a sensitivity to internal boundary?)).

The following are descriptions for each PM location:

100, 101, 102, 103 – calibration/validation stages at/near the model's land surface elevation seem reasonable. Shorter than desired hydroperiods resulting from the calibration/validation seem consistent with existing landscape concerns.
Calibration/validation stages at higher and lower end of the spectrum may be exhibiting a slight positive bias. However the calibration/validation stage hydrograph patterns are more similar than not to patterns of discharge observed in the DBHYDRO S18C data (via visual inspection).

2 – calibration/validation stages at/near the model's land surface elevation seem reasonable, but with a potential (slight; maybe < 0.25') positive bias. Hydroperiods resulting from the calibration/validation at this location seem slightly too long (~4-8 weeks on average) relative to documented landscape/habitat concerns (i.e., seaside sparrow habitat).

3 – calibration/validation stages at/near the model's land surface elevation seem reasonable. Hydroperiods resulting from the calibration/validation at this location seem reasonable. The calibration/validation stages seem to be noisier than the field data.

4 – calibration/validation stages at/near the model's land surface elevation seem slightly low (maybe 0.25' to 0.5'). Hydroperiods resulting from the calibration/validation at this location seem too short (maybe 8-14 weeks).

5 – calibration/validation stages at/near the model's land surface elevation seem reasonable. Hydroperiods resulting from the calibration/validation at this location seem reasonable.

6 – calibration/validation stages at/near the model's land surface elevation seem reasonable to slightly high. Hydroperiods resulting from the calibration/validation at this location seem reasonable.

7, 8 – calibration/validation stages at/near the model's land surface elevation seem slightly low (maybe 0.25' to 0.5'). Hydroperiods resulting from the calibration/validation at this location seem slightly too short.

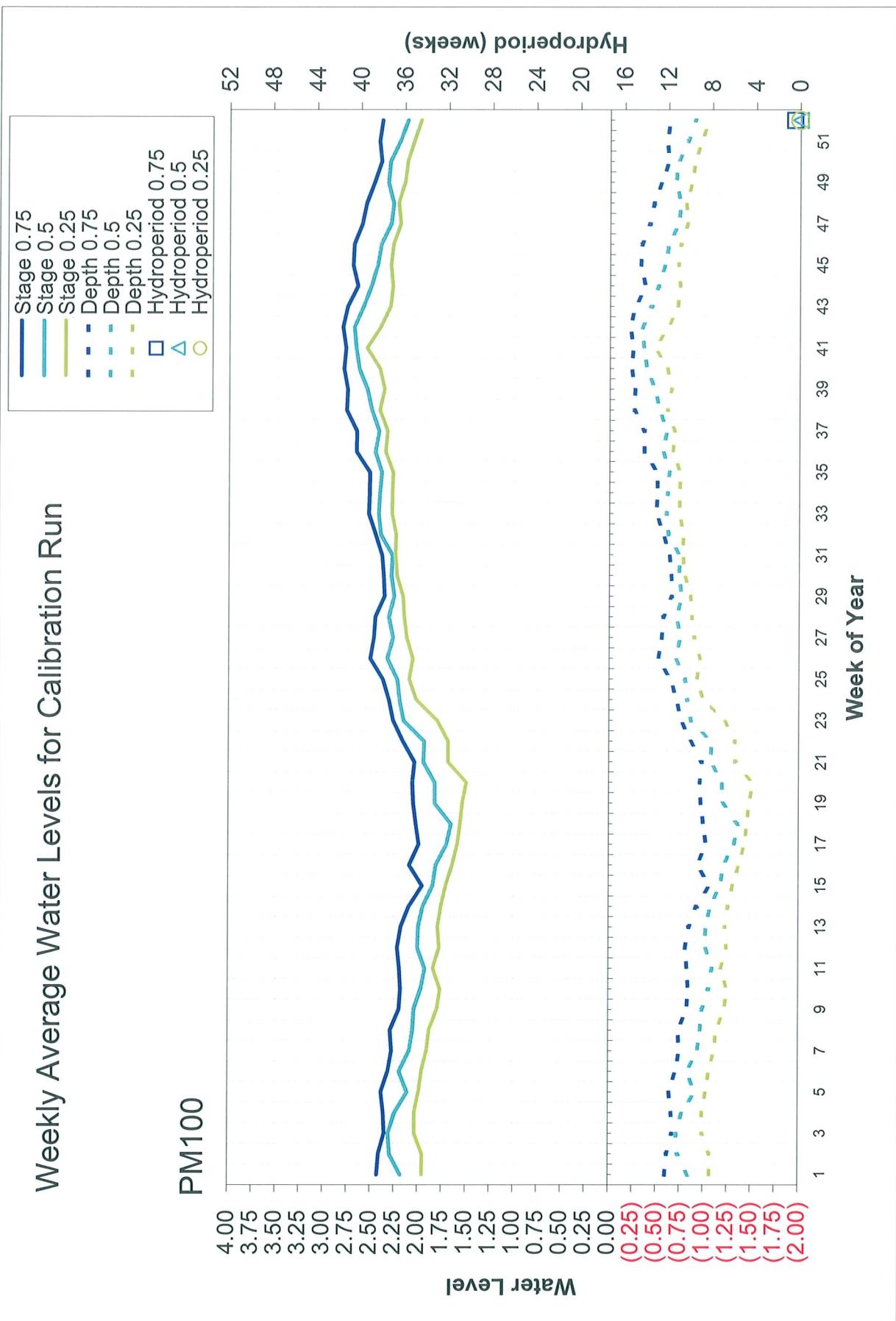
9 – calibration/validation stages at/near the model's land surface elevation seem slightly high (maybe 0.25'). Hydroperiods resulting from the calibration/validation at this location seem too long (hydroperiods suggest sawgrass marsh and/or flooding during 75%-100% of each year).

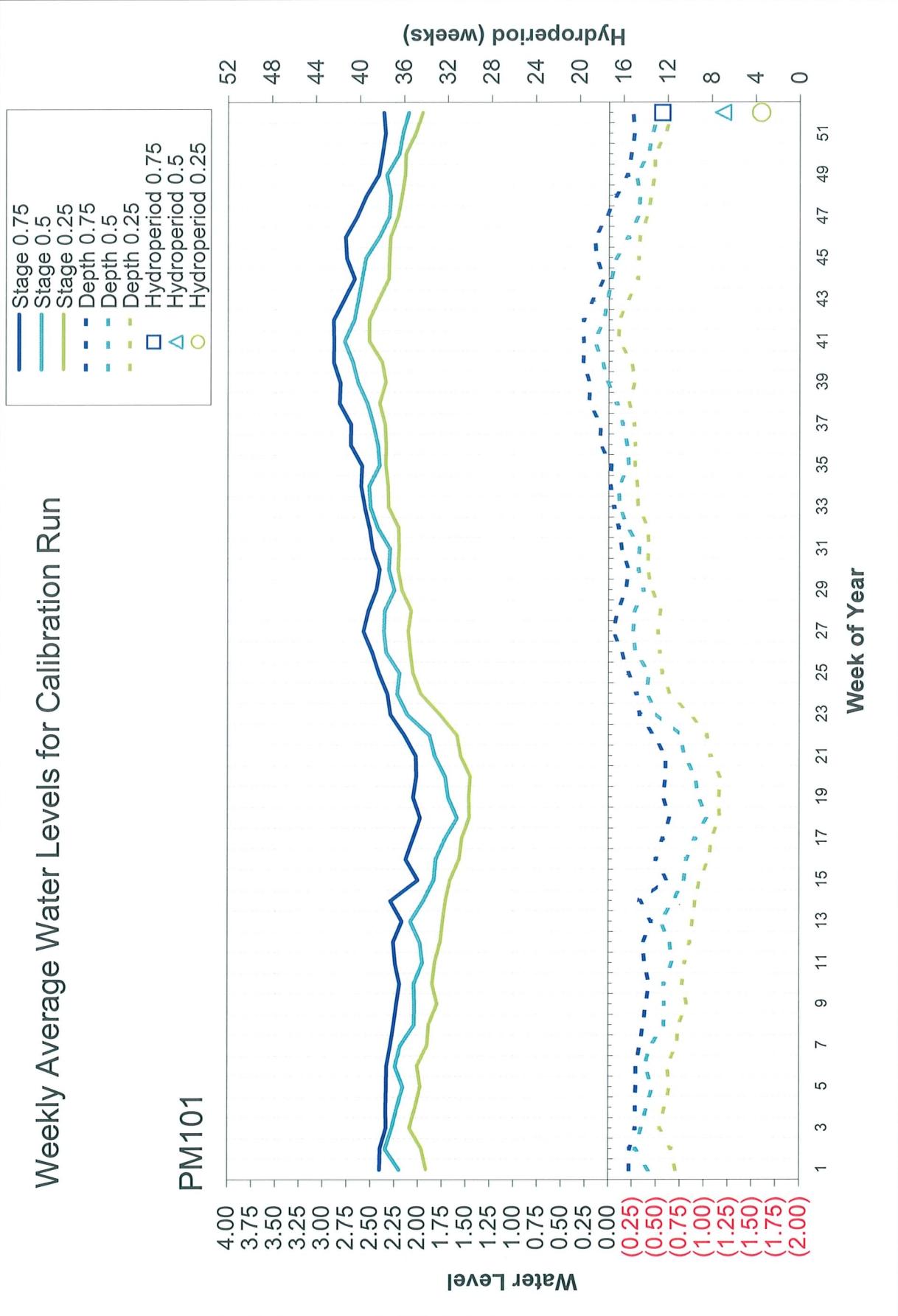
10, 11 – calibration/validation stages at/near the model's land surface elevation seem reasonable. Hydroperiods resulting from the calibration/validation at this location seem reasonable to slightly too long (maybe 4-10 weeks).

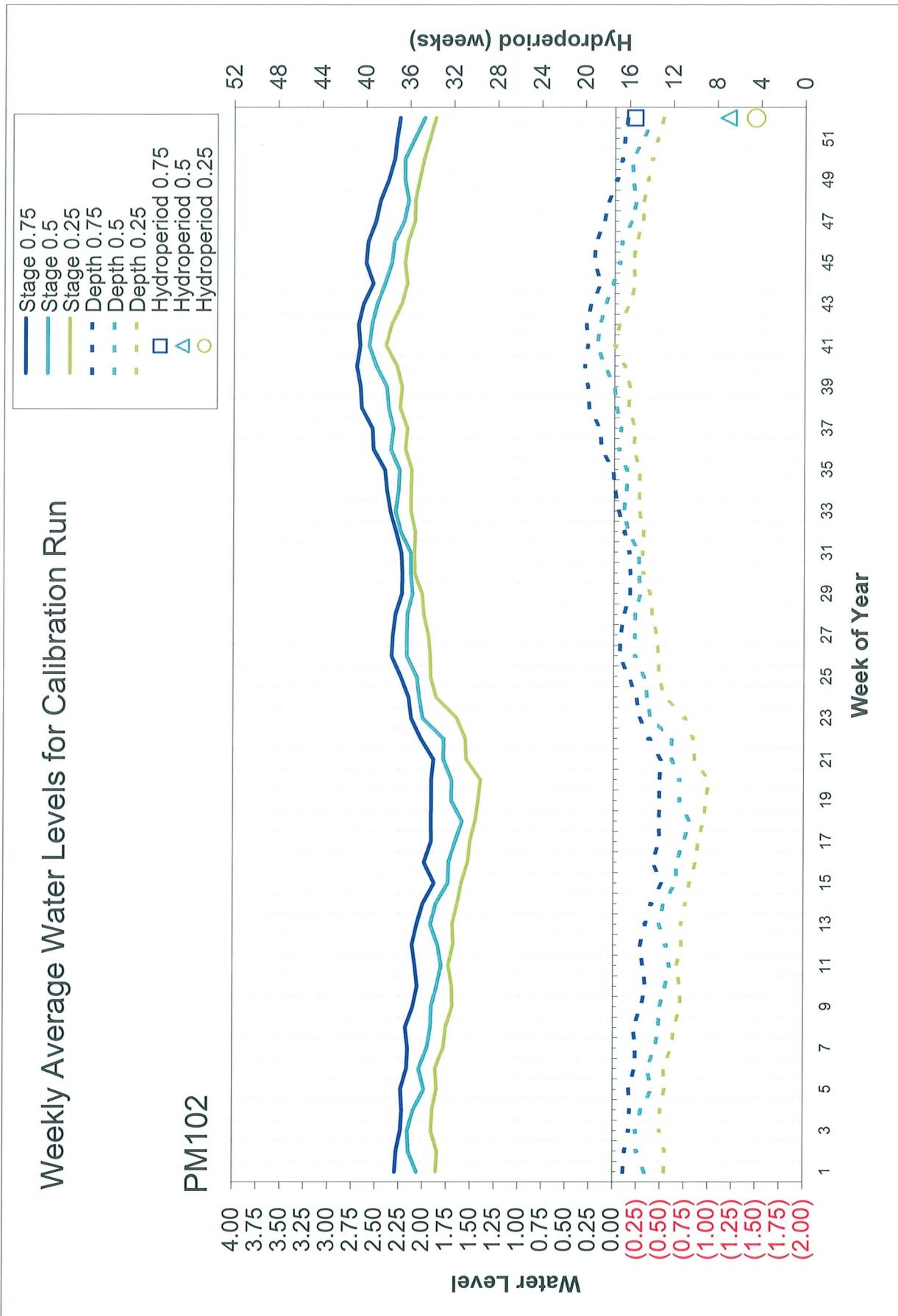
12 - calibration/validation stages at/near the model's land surface elevation seem reasonable to slightly high (maybe 0.25'). Hydroperiods resulting from the calibration/validation at this location seem reasonable to slightly too long.

If you have any questions, please feel free to ask.

Thanks,
Shawn

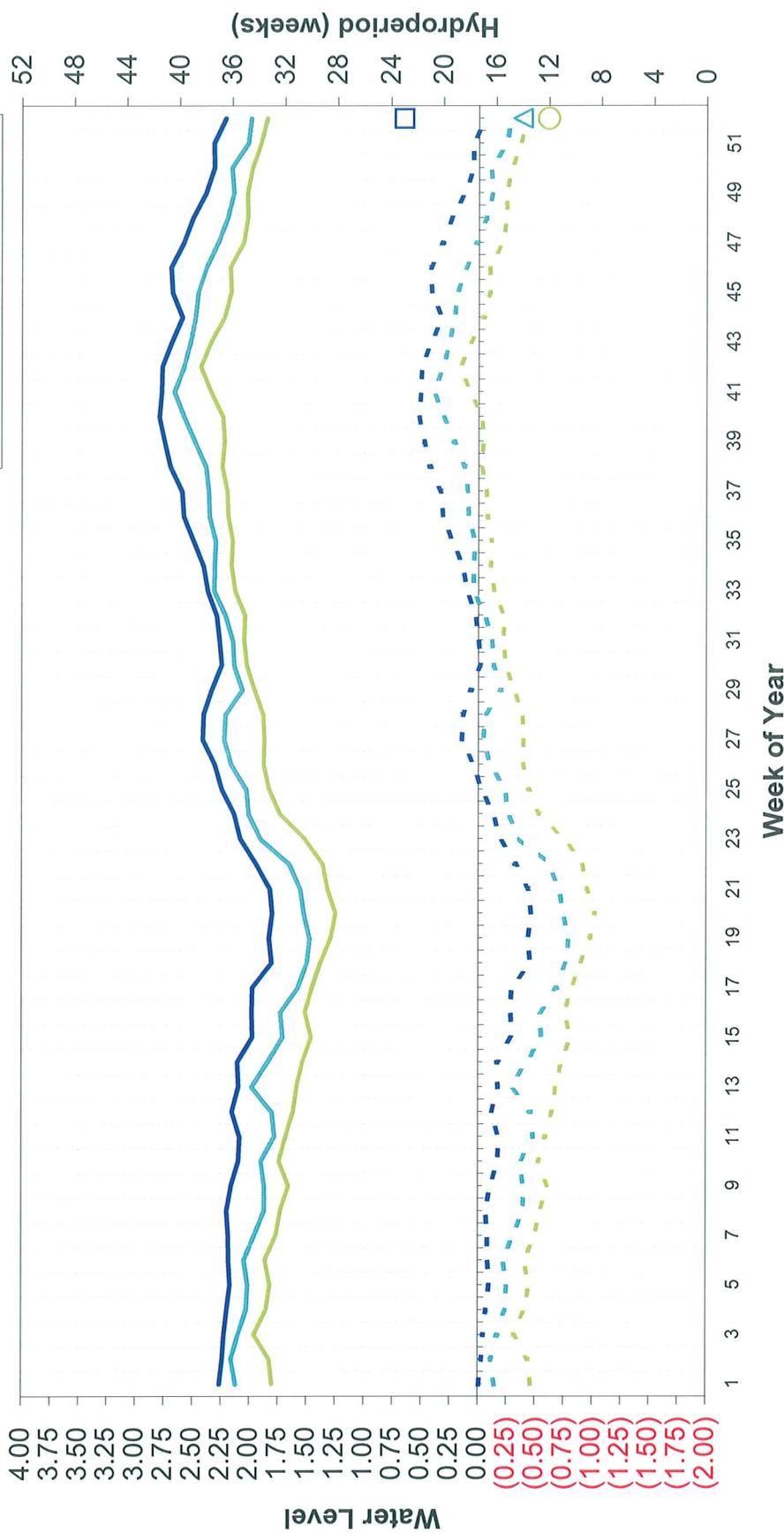
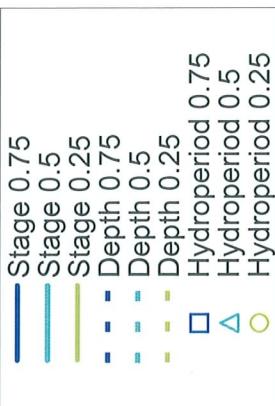


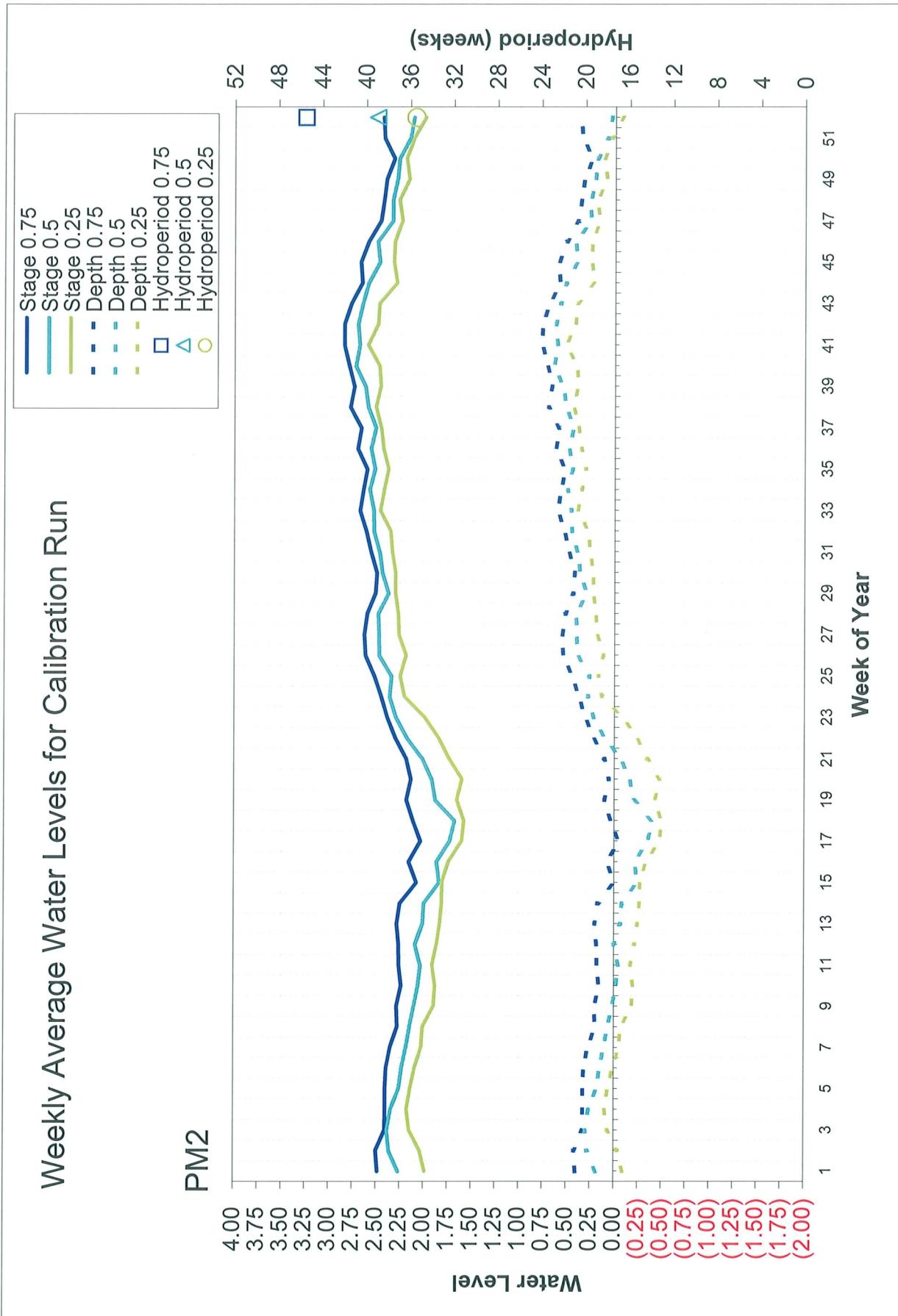


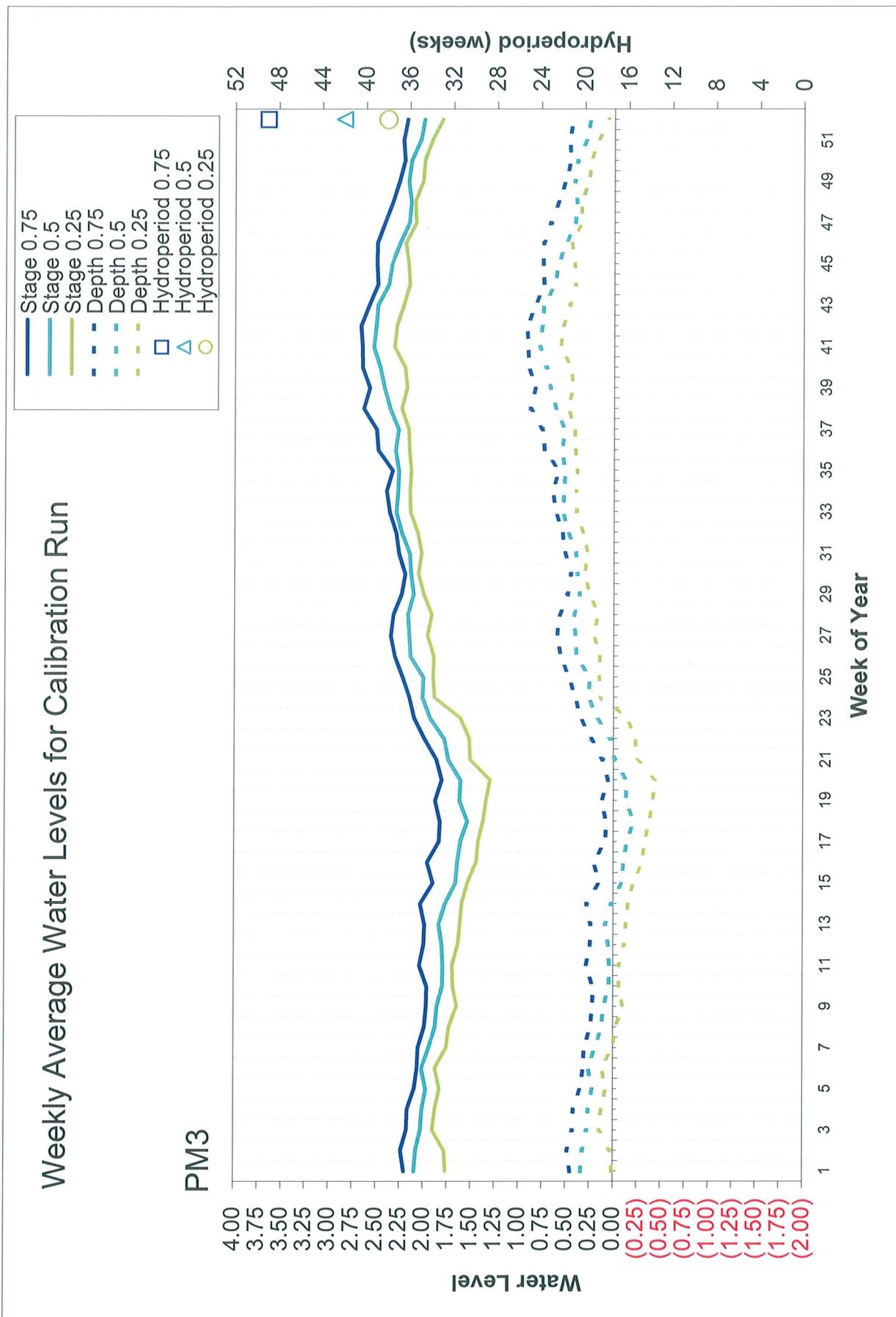


Weekly Average Water Levels for Calibration Run

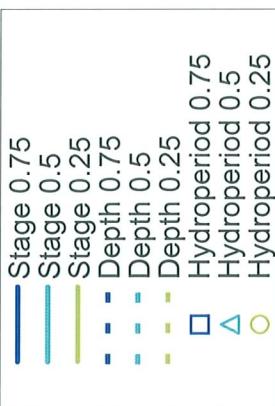
PM103



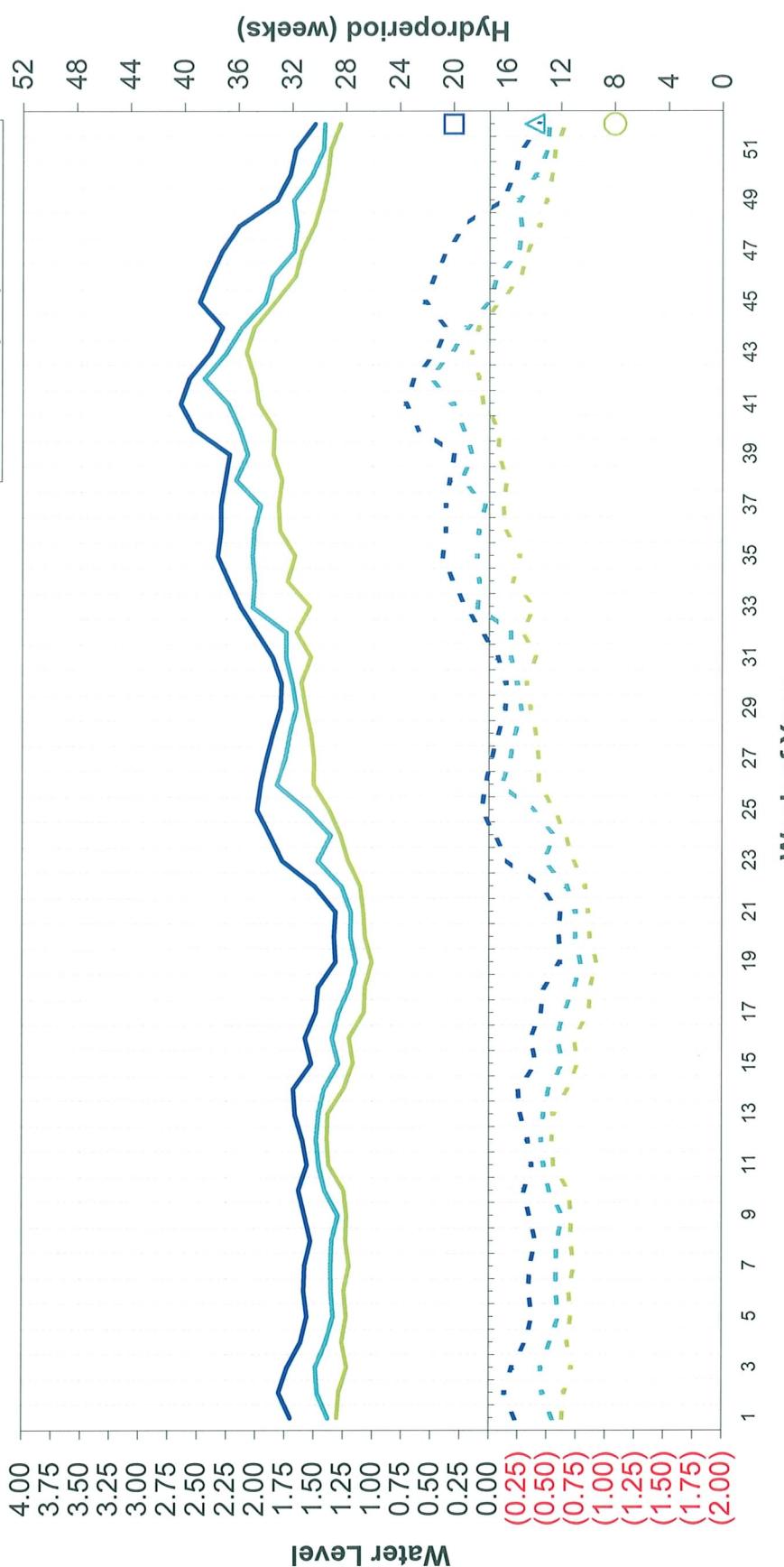


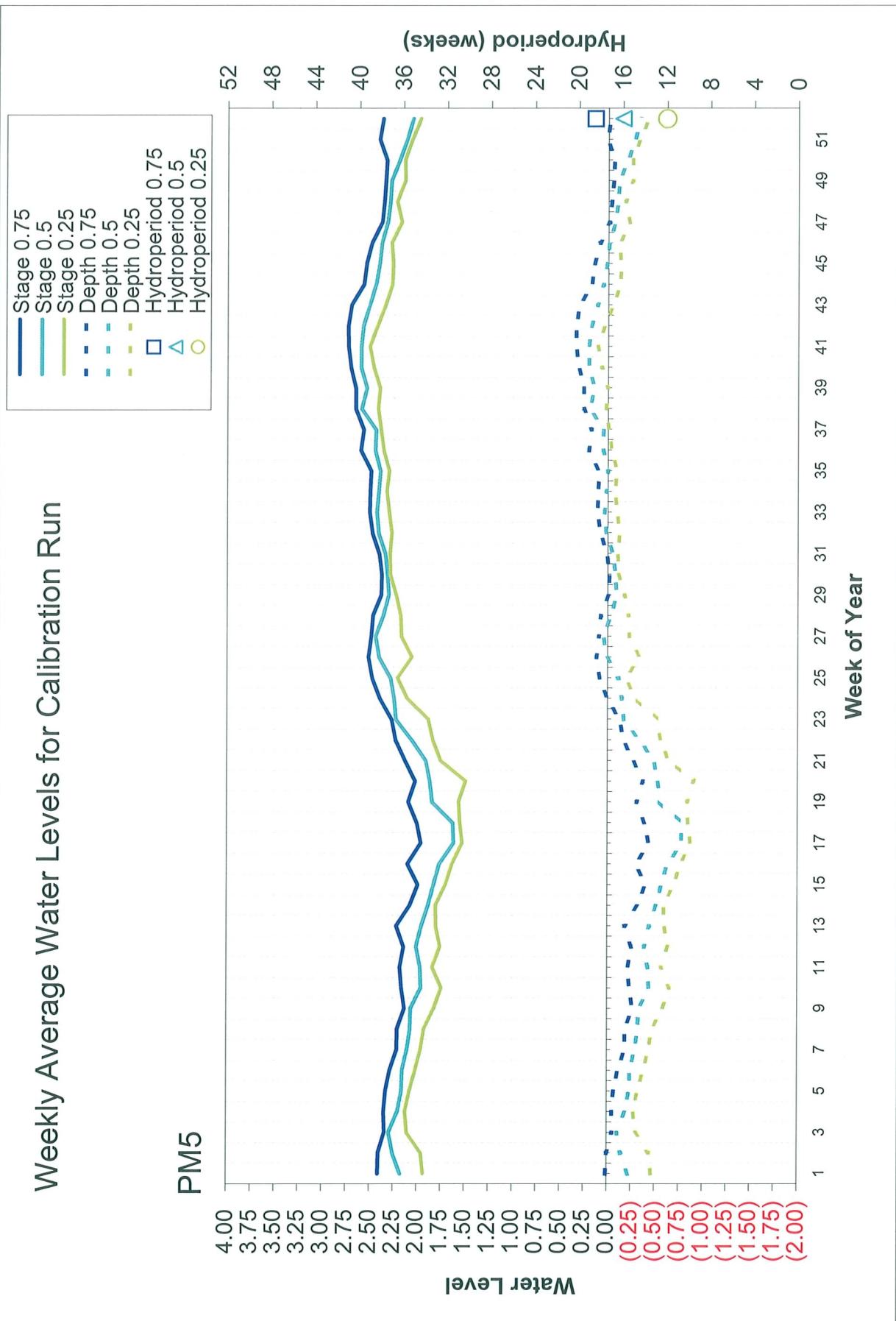


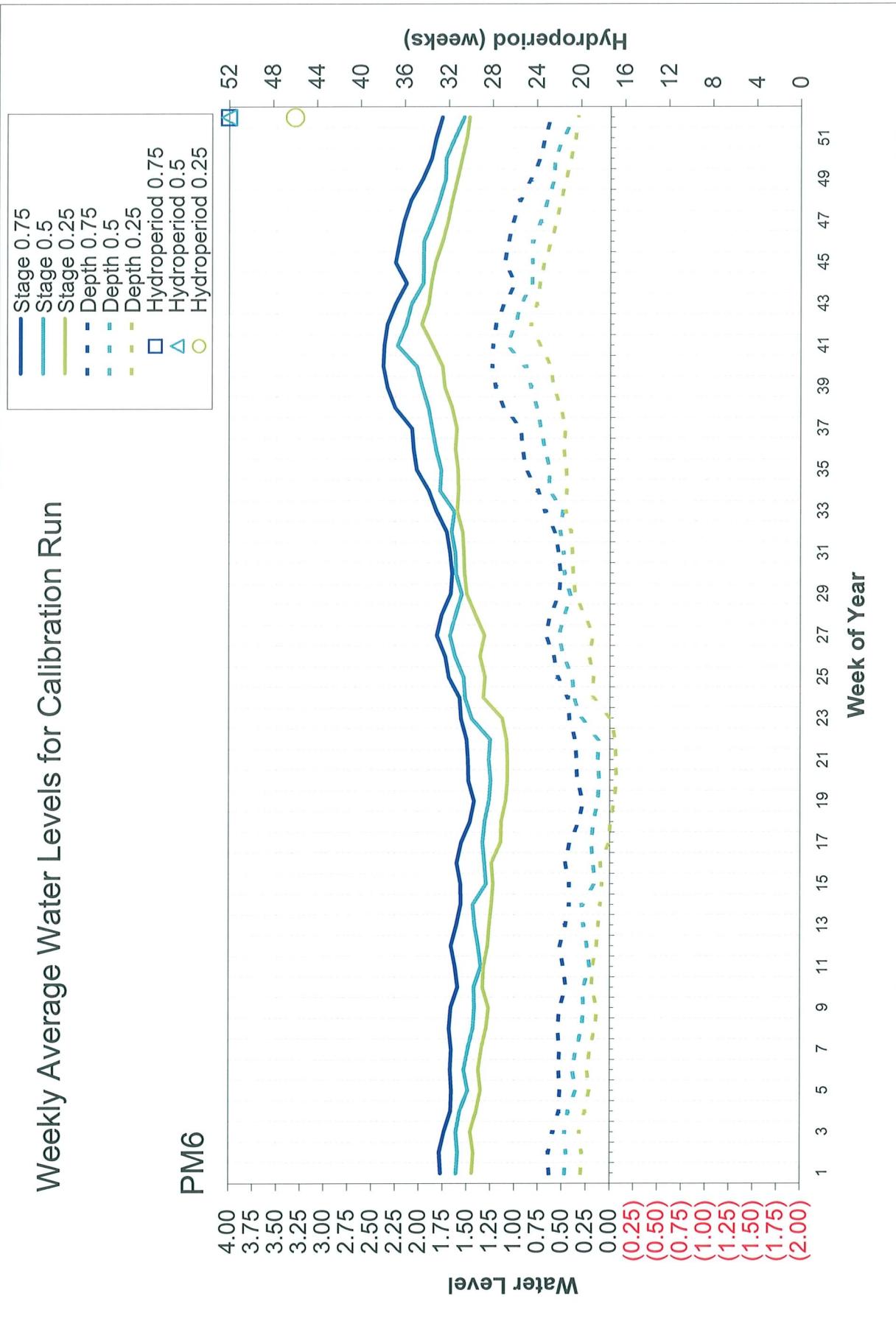
Weekly Average Water Levels for Calibration Run

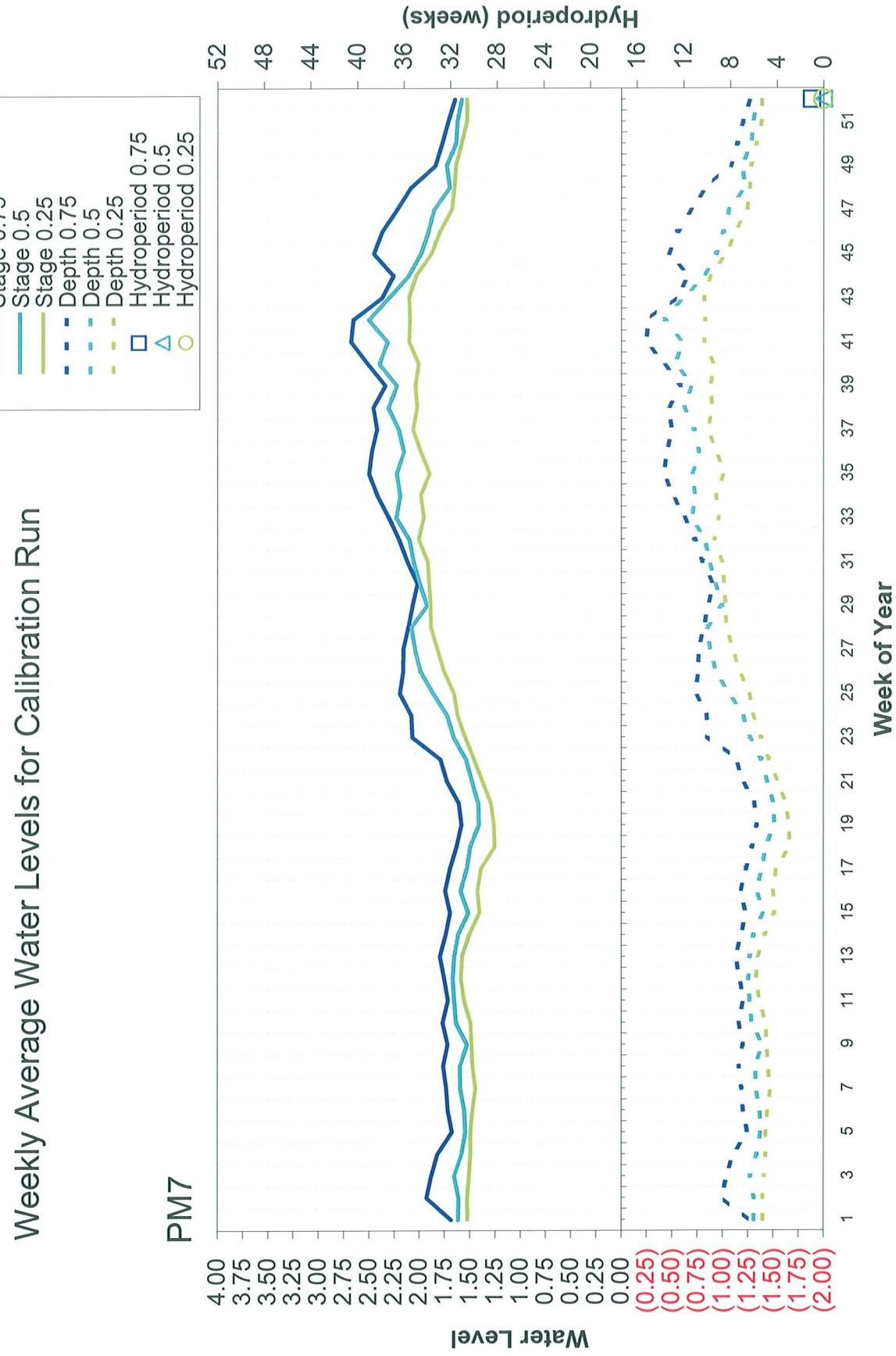


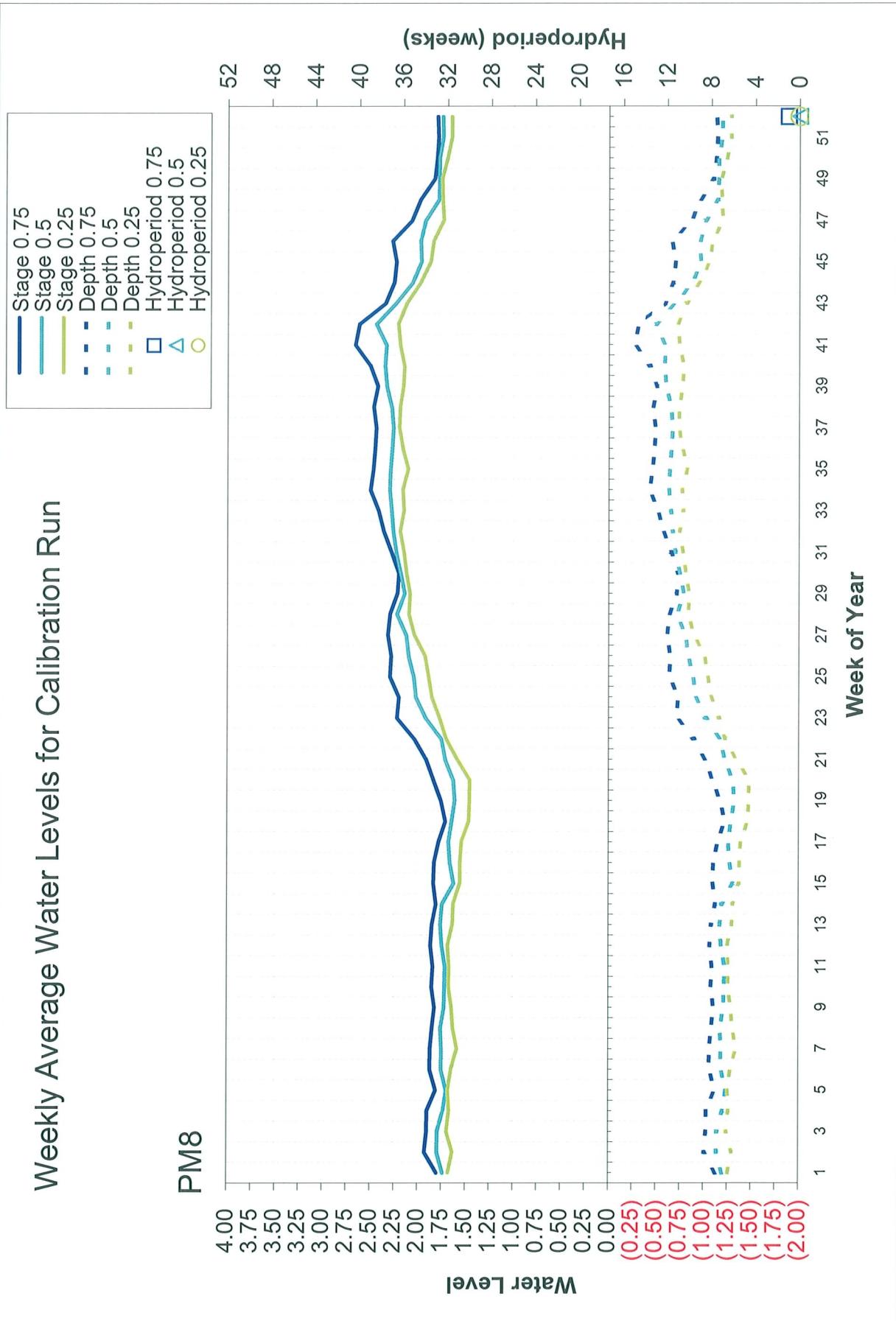
PM4











Weekly Average Water Levels for Calibration Run

